Grenoble, France
July 2022

Post-doc position in **sensors integration** for **a human "*Pancreas-on-chip*"** project in Grenoble (France)

In collaboration with Grenoble Hospital and IRIG institute, LETI institute opened a postdoctoral position to hire young researcher willing to contribute its expertise and enthusiasm at the service of an ambitious "Pancreas-on-Chip" multidisciplinary project. This project implies a range of interdisciplinary technologies and advanced approaches in microfluidics, sensors integration, stem cells and nanomaterials, to engineer devices that can recapitulate functional units of human pancreas.

The proposed position concerns the **integration of an electrochemical sensor in a microfluidic component** and its qualification. The candidate will contribute to the development of an innovative sensor to characterize the functional units of the human "*Pancreas-on-chip*". He will be in charge of the design, part of the manufacturing and the experimental tests that include characterization and integration of the sensor into a microfluidic component.

The post-doctoral fellow should have a **PhD in the field of engineering**. Previous experience in the field of integration of electrochemical or impedance sensors is desirable. An ability to fruitfully interact in an interdisciplinary team is strictly required, as well as a good English language skills.

In the Grenoble MINATEC campus for innovation in micro and nanotechnologies, **the LETI Institute** is an applied research center in microelectronics, technology information and health. Closely with hospital, universities and institutions of higher education, the Division of applied Technologies for Biology and Health (Leti HEALTH, http://www-leti.cea.fr/en/Discover-Leti/Leti-s-research/Application-fields/Sante) develops new technologies to improve medical diagnosis and treatment of patients. At the interface between academic research and industrial development, CEA Tech Leti Health division has large laboratory facilities, equipped with clean rooms, microfabrication units and chemistry/ biology laboratories (L1, L2 safety levels) and an international network of partners.

The Interdisciplinary Research Institute of Grenoble (IRIG) develops multidisciplinary approaches with the aim of deciphering the molecular mechanisms behind major biological processes. Thanks to its environment and the state-of-the-art technological platforms available at the institute, IRIG explores the dynamic architectures of "Life" at scales ranging from the atom to the whole organism. This multi-scale knowledge allows us, with our academic and industrial partners, to develop new Life-inspired devices. The technological breakthroughs made possible by this bio-inspired approach should lead to promising returns that will improve health and promote greater respect for our environment.

Interested candidates should email their CV and application letter, including the contact information of two references (mandatory) to:

- Frédéric Revol-Cavalier, CEA-LETI material and integration expert at: frederic.revol-cavalier@cea.fr
- Yohann Thomas, CEA-LETI electrochemistry expert at: yohann.thomas@cea.fr
- Nicolas Verplanck, CEA-LETI microfluidic manufacturing team leader at: nicolas.verplanck@cea.fr